

Piedmont Regional Office  
JAN 25 2012  
**RECEIVED**

**LAND APPLICATION SITE**

**R W BRIDGMAN SITE**

**DWRWB 1**

**DINWIDDIE COUNTY**

# RECYC SYSTEMS, INC

## PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 12-8-11 between RW + JACKIE BRIDGMAN referred to here as "landowner" and Recyc Systems, Inc referred to here as the "Permittee"

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as \_\_\_\_\_ (landowner's land). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number \_\_\_\_\_ which is held by the Permittee.

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property and consents to the application of biosolids on his property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health:

- 1 Public access to landowner's land upon which biosolids have been applied should be controlled for at least 30 days following any application of biosolids and no biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols.
- 2 Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation. Other food crops, feed crops and fiber crops shall not be harvested for 30 days after the application of biosolids.
- 3 Following biosolids application to pasture or hayland sites, meat producing livestock should not be grazed or fed chopped foliage for 30 days and lactating dairy animals should be similarly restricted for a minimum of 60 days. Other animals should be restricted from grazing for 30 days.
- 4 Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia to be supplied to the landowner by the permittee at the time of application of biosolids to a specific permitted site.
- 5 Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).
- 6 Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.

The landowner agrees to allow county officials access to the area of the property permitted for biosolids, whenever necessary, to complete site inspections related to the scheduled biosolids program.

Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner Signature

Landowner Print Name

Mailing Address

17805 old Cryors RD.

McKENNEY, VA. 23872

Phone 804-586-0840

Mailing Address

Farm Operator Signature

Farm Operator Print Name

Phone

Mailing Address

Permittee

Recyc Systems, Inc

P O Box 562

Remington Virginia 22734

(540) 547-3300

# RECYC SYSTEMS, INC

## PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 12-12-11 between R W BORDMAN referred to here as "landowner" and Recyc Systems, Inc, referred to here as the "Permittee"

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as \_\_\_\_\_ ("landowner's land") Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number \_\_\_\_\_ which is held by the Permittee

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property and consents to the application of biosolids on his property Moreover, landowner acknowledges having been expressly advised that, in order to protect public health

- 1 Public access to landowner's land upon which biosolids have been applied should be controlled for at least 30 days following any application of biosolids and no biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols,
- 2 Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation Other food crops, feed crops and fiber crops shall not be harvested for 30 days after the application of biosolids,
- 3 Following biosolids application to pasture or hayland sites, meat producing livestock should not be grazed or fed chopped foliage for 30 days and lactating dairy animals should be similarly restricted for a minimum of 60 days Other animals should be restricted from grazing for 30 days,
- 4 Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10 1-104 2 of the Code of Virginia to be supplied to the landowner by the permittee at the time of application of biosolids to a specific permitted site,
- 5 Tobacco because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare)
- 6 Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority

The landowner agrees to allow county officials access to the area of the property permitted for biosolids, whenever necessary, to complete site inspections related to the scheduled biosolids program

Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land This agreement may be terminated by either party upon written notice to the address specified below

Landowner Signature \_\_\_\_\_

Landowner Print Name \_\_\_\_\_

Claude Townsend  
Farm Operator Signature

CLAUDE V. TOWNSEND  
Farm Operator Print Name

Permittee

Recyc Systems, Inc

Mailing Address \_\_\_\_\_

Phone \_\_\_\_\_

Mailing Address \_\_\_\_\_

18401 OLD CRYORS RD

McKENNEY VA. 23872

Phone 804-478-5728

Mailing Address \_\_\_\_\_

P O Box 562

Remington Virginia 22734

(540) 547-3300

# FARM DATA SHEET

<b>SITE NAME</b>	R W Bridgman Site	<b>COUNTY</b>	Dinwiddie
<b>OWNER</b>	RW Jlr & Jackie T Bridgman	<b>OPERATOR</b>	Claude V Townsend
<b>OWNER'S ADDRESS</b>	17805 Old Cryors Rd McKenney, VA 23872	<b>OPERATOR'S ADDRESS</b>	18401 Old Cryors Rd McKenney, VA 23872
<b>OWNER'S TELEPHONE</b>	804-586-0840	<b>OPERATOR'S TELEPHONE</b>	804-478-5728
<b>GENERAL FARM TYPE</b>	Hay	<b>CELLPHONE</b>	804-691-0747
<b># CATTLE</b>	None	<b>EMAIL:</b>	
<b>LAGOON or SLURRY</b>	None	<b>LATITUDE</b>	37°01'42"
<b>TOPO QUAD</b>	Darvilles	<b>LONGITUDE</b>	77°48'09"
<b>COMMENTS</b>			

## R W Bridgman Site

[illegible]

# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
DWRWB 1	12 1	-	-	-	-	CU11	TM65,P29	T404
TOTAL ACRES IN SITE	12 1							

Report Number 11-342-0804  
Account Number 70594



www.aleastern.com

# A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond Virginia 23237 (804) 743 9401 Fax (804) 271-6446

Send To RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower  
BRIDGMAN/DWCVT  
DINWIDDIE

Submitted By J B CRENSHAW  
Farm ID

## SOIL ANALYSIS REPORT

Analytical Method(s)  
Mehlich 3

Date Received 12/08/2011

Date Of Analysis 12/09/2011

Date Of Report 12/12/2011

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity		C E C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g		
8 DWRWS I	08506	2.2	L	89	41	M			47	L	72	H	433	M			6.1	6.88	0.5		3.3

Sample ID Field ID	Percent Base Saturation					Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride		Aluminum	
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm	Rate	S ppm	Rate	Zn ppm	Rate	Mn ppm	Rate	Fe ppm	Rate	Cu ppm	Rate	B ppm	Rate	SS ms/cm	Rate	Cl ppm	Rate	Al ppm	
8 DWRWS I	3.7	18.2	65.6		13.9																				

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low) L (Low) M (Medium) H (High) VH (Very High) ENR - Estimated Nitrogen Release C E C - Cation Exchange Capacity

Explanation of symbols: % (percent) ppm (parts per million) lbs/A (pounds per acre) ms/cm (milli-mhos per centimeter) meq/100g (milli equivalent per 100 grams) Conversions: ppm x 2 = lbs/A Soluble Salts ms/cm x 640 = ppm

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by A&L Eastern Laboratories Inc.

by *Paucic McGroary*

Paucic McGroary

*1.87*  
*12-13-11*

Report Number 11-342-0804

Account Number 70594



www.aleastern.com

# A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond Virginia 23237 (804) 743 9401 Fax (804) 271-6446

Send To RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower  
BRIDGMAN/DWCVT  
DINWIDDIE

Submitted By J B CRENSHAW  
Farm ID

Date Received 12/08/2011

Date Of Report 12/12/2011

## SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P <sub>2</sub> O <sub>5</sub> lb/A	Potash K <sub>2</sub> O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
8 DWRW31	Adjust pH to 6.8	0	13				8						

### Comments

#### Sample(s) 9

If dolomitic lime is not used, apply required magnesium with magnesium oxide Epsom Salts, K-Mag or Sul-PO-Mag

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied concerning crop performance is made"

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or part nor may any reference be made to the work the results or the company in any advertising news release or other public announcements without obtaining our prior written authorization. Copy right 1977

*Paucic McGroary*

Paucic McGroary

182  
17 13 11



## NUTRIENT MANAGEMENT PLAN IDENTIFICATION

### Operator

Claude Townsend  
18401 Old Cryors Road  
McKenney, VA 23872  
804-478-5728

Integrator None

### Farm Coordinates

Easting 0, Northing 0, zone 17

### Watershed Summary

watershed CU11  
county Dinwiddie

### Nutrient Management Planner

Recyc Systems Inc  
Recyc Systems, Inc  
P O Box 562  
Remington, Virginia 22734  
540 547 3300

Certification Code None

### Acreage Use Summary

Total Acreage in this plan 112.1

Cropland 0 0

Hayland 12 12.1

Pasture 0 0

Specialty 0 0

### Livestock Summary

Beef Cattle 0 0

Dairy Cattle 0 0

Poultry 0 0

Swine 0 0

Other 0 0

### Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0	0	0	0	0
tons	0	0	0	0	0

Plan written 12/28/2011

Valid until 12/28/2011

Signature

Planner

date

THE PLANNER IS NOT STATE CERTIFIED

***Nutrient Management Plan Balance Sheet  
(Spring, 2012-Summer, 2013)  
RW Bridgman  
Planner: Recyc Systems Inc***

Tract 404 Location Dinwiddie  
(N = N based, 1P = P based, 1 5P = P based at 1 5 removal, 0P = No P allowed)

Field CFSA No /Name	Size (ac) Total/ Used	Yr	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1 13 14,15/DWRW B 1(N)	12/12	2012	Fescue grass hay mt	90-70-200	0/0				90-70-200	N/A			

Commercial Application Methods

br - Broadcast ba - Banded sd - Sidedress

Notes

**THE PLANNER IS NOT STATE CERTIFIED**

**RW Bridgman Narrative**

This is Bridgman Farm located in Dinwiddie County. The farm consists of hay fields.

This is a partial plan written for the purpose of obtaining a biosolids permit. Biosolids application has not been shown since it is uncertain when a biosolids permit will be obtained. The partial plan will be revised prior to biosolids application to obtain a target biosolids application rate.

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec lime tons/Ac
404	DWRWB 1	12	2011-Wi	M+ (41 P ppm)	L+ (47 K ppm)	A&L MIII	6.1		

### Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Gram	Alfalfa	Grass Hay	Environmental Warnings
404	404/1,13, 14,	DWRWB 1	12	Cecil	IVa	II	III	II	

### Yield Range

Field Productivity Group	Corn Gram Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	≥170	≥80	≥64	≥6	≥40
II	150-170	70-80	56-64	4-6	35-40
III	130-150	60-70	48-56	≤4	30-35
IV	100-130	50-60	40-48	NA	≤30
V	≤100	≤50	≤40	NA	NA

## Farm Summary Report

**Plan**                      **New Plan**                      **Spring, 2012 - Summer, 2013**

**Farm Name**      **RW Bridgman**  
Location          Dinwiddie  
Specialist        Recyc Systems Inc  
N-based Acres    12 1  
P-based Acres    0 0

**Tract Name**      **404**  
FSA Number      404  
Location                      Dinwiddie

**Field Name**              **DWRWB 1**  
Total Acres      12 10      Usable Acres      12 10  
FSA Number      1,13,14,15  
Tract              404  
Location                      Dinwiddie  
Slope Class      B              Hydrologic Group      B

Riparian buffer width 0 ft  
Distance to stream 0 ft

### **Conservation Practices**

Pasture (>75% cover)

### **P-Index Summary**

N-based

Phosphorus Limit method    Phosphorus Environmental Threshold (PET) method

### **Soil Test Results**

DATE	PH	P	K		Lab
Wi-2011	6 1	M+(41 P ppm)	L+(47 K ppm)	A&L MIII	

### **Soils**

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

44	2B	Appling
56	4B	Cecil

***Field Warnings***

***Crop Rotation***

PLANTED	YIELD	CROP NAME
2012-Sp	3 1 * tons	Fescue grass (hay), maint - No Till

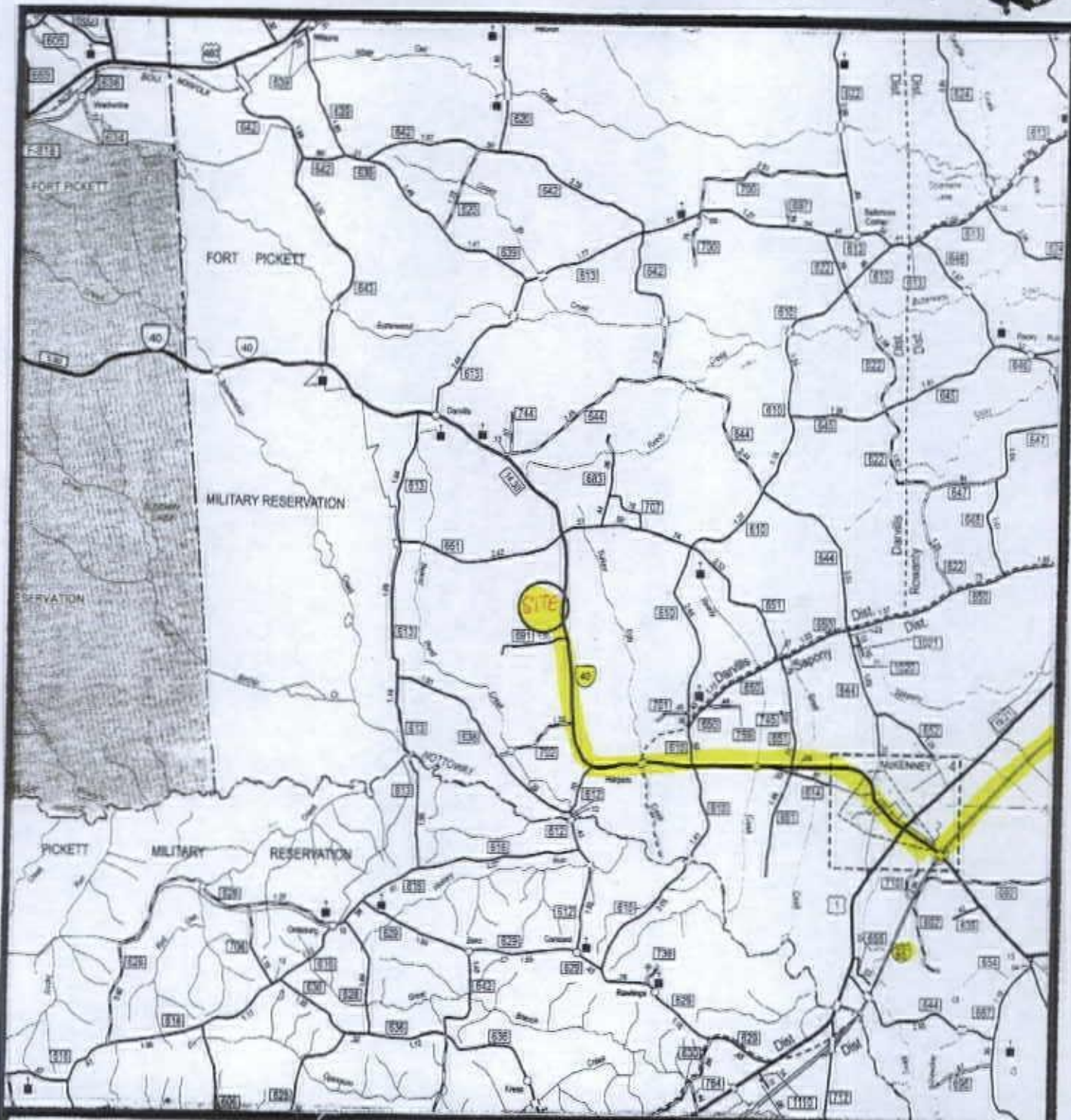


# MAPS



# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:**

1 inch = 2 miles

DWRWB 1

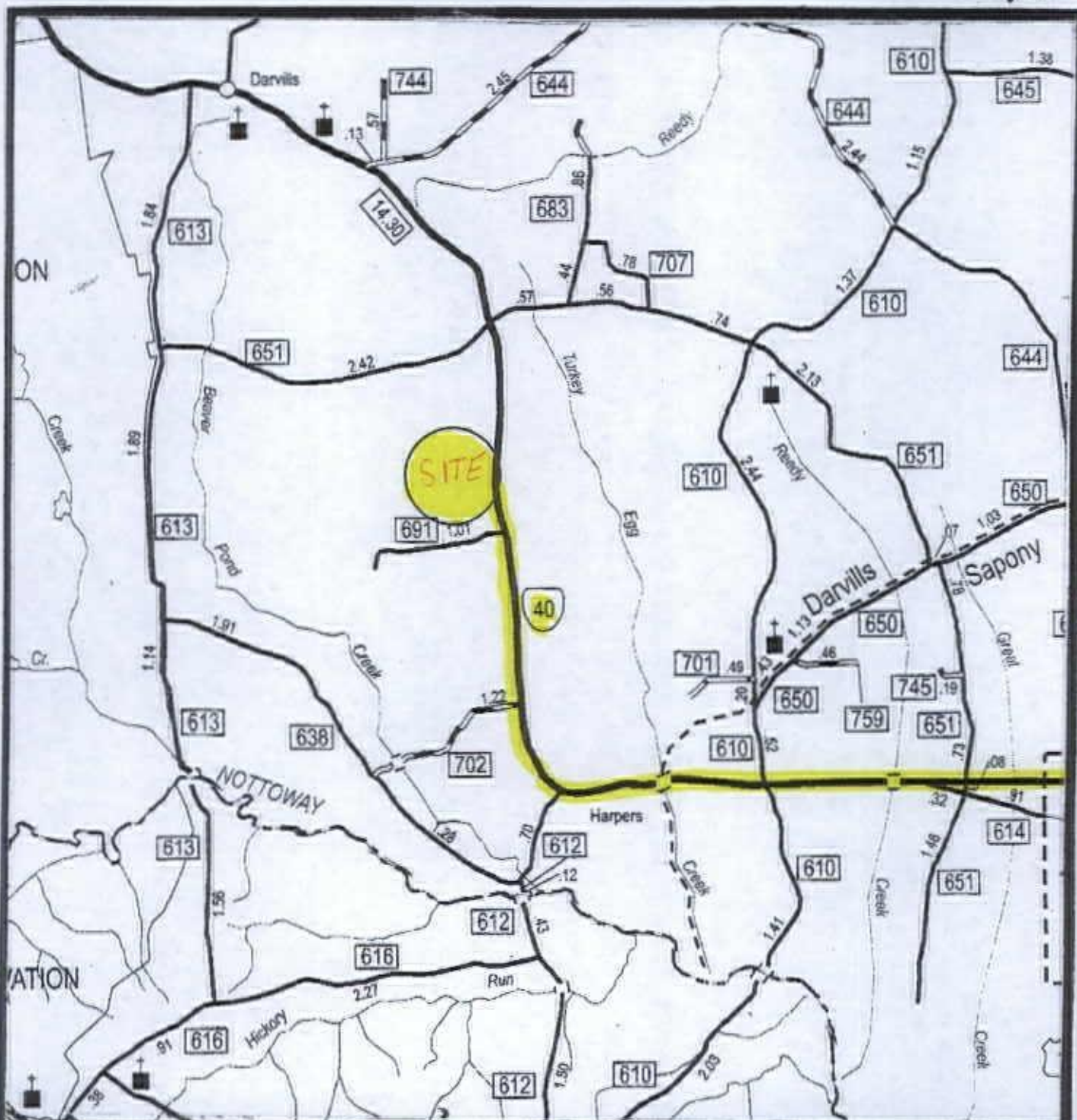
**VICINITY MAP**





# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



Scale:

1 inch = 1 mile

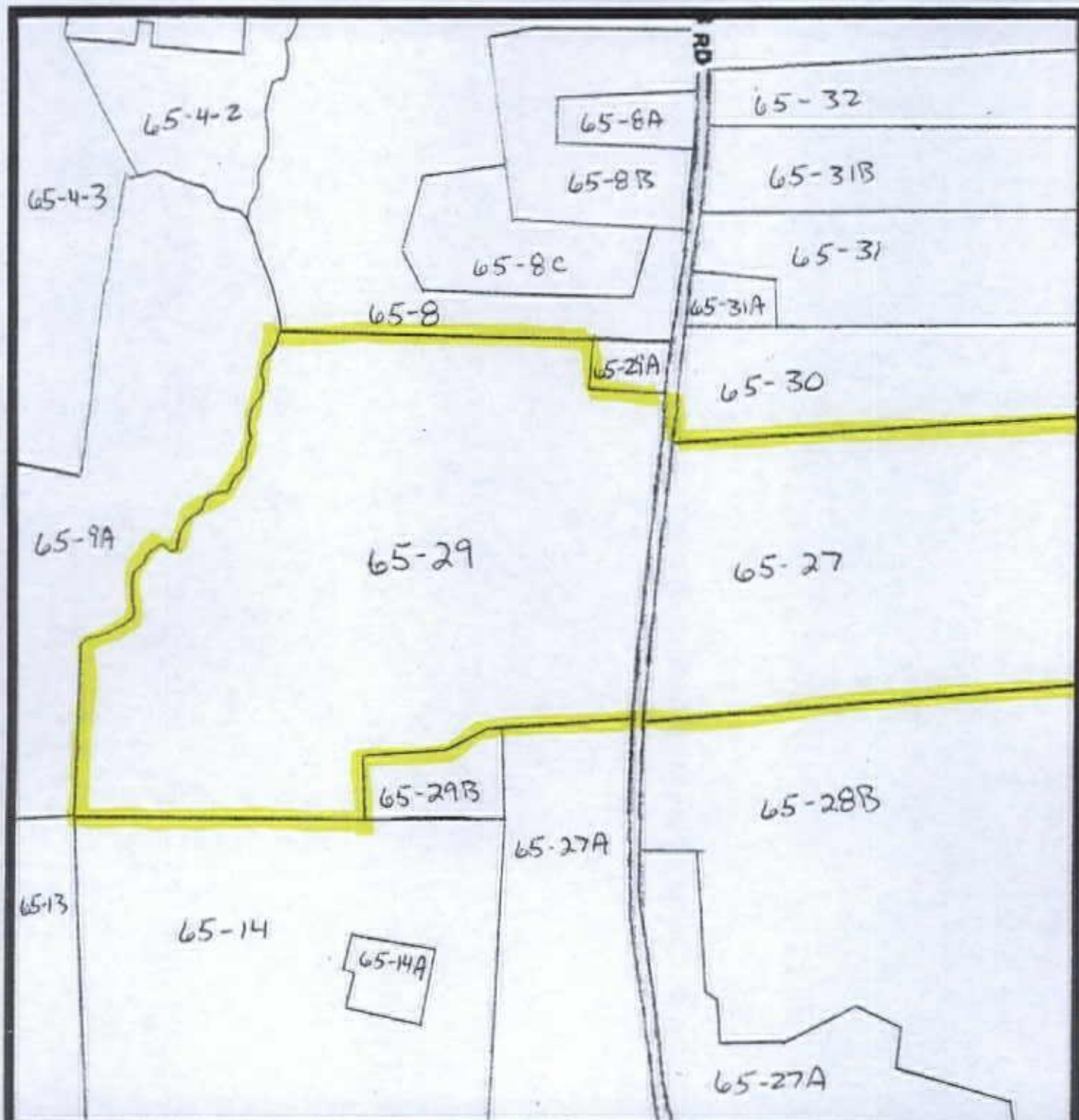
DWRWB 1

VICINITY MAP



# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:**

1 inch = 660 feet

DWRWB 1

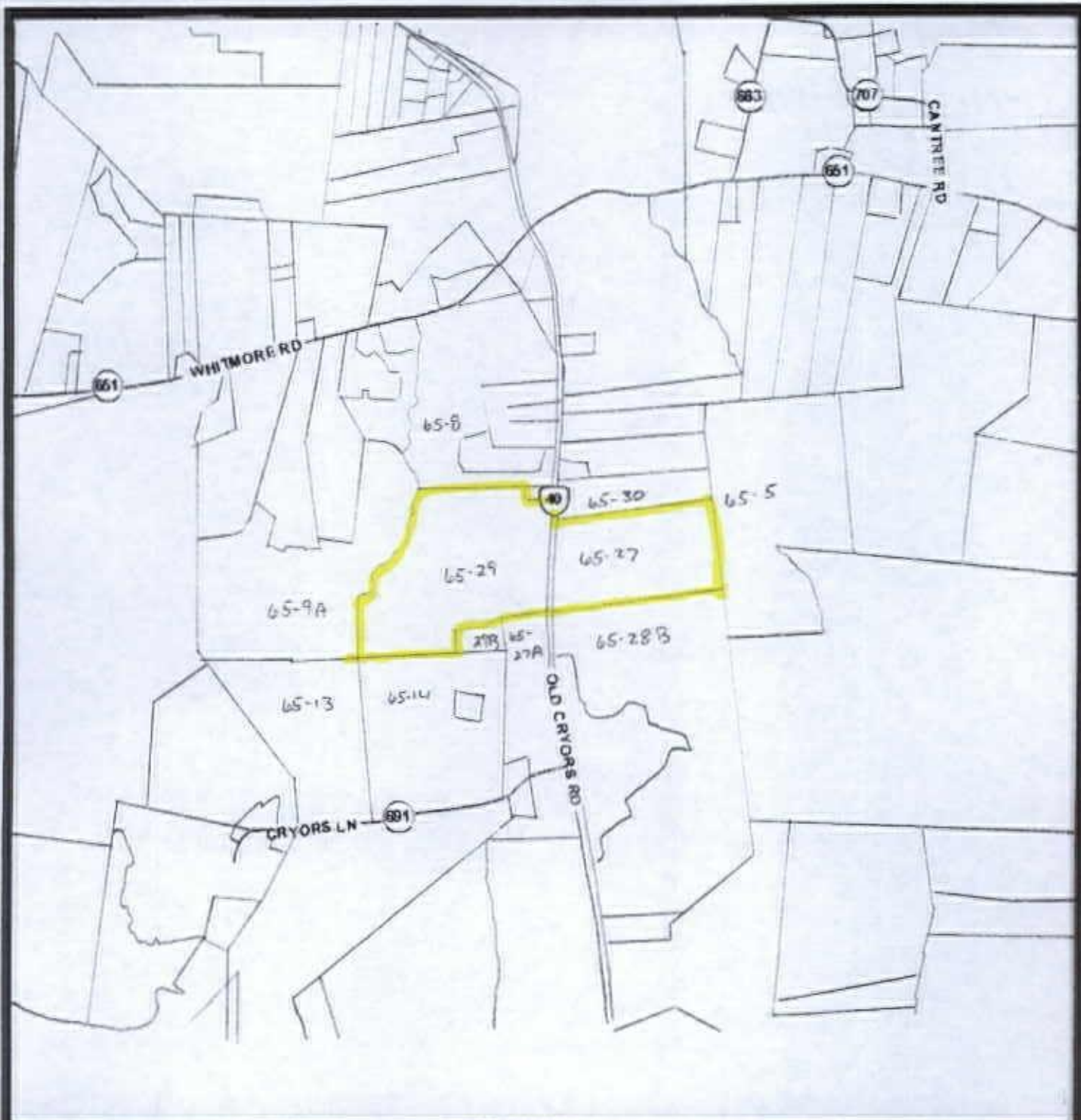
**TAX MAP**





**Inc.**

**(Biosolids Land Application)**



**Scale:**

1 inch = 2,000 feet

DWRWB 1

## TAX MAP



# ADJOINING LANDOWNERS

R W BRIDGMAN SITE

## DINWIDDIE COUNTY

Tax Map	Parcel #	Owner Name(s)
65	8	Thomas D. & Susan P. Stone
	9A	John R., III & Barbara F. Ragsdale
	13	William H. Gammon & Janie G. Wilkins
	14	James T. Rasnake
	27A	Claude V. & Rita M. Townsend
	28B	TIAA Timberlands 1 LLCC
	29A	Margaret Stone Gibbs
	29B	Aubrey L., Jr. & Loura B. Henley
	30	Thomas D. & Susan P. Stone
66	5	TIAA Timberlands 1 LLCC



# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:**

1 inch = 660 feet

DWRWB 1

**SOIL MAP**





T404

**Scale:**

1 inch = 660 feet

DWRWB 1

AERIAL MAP





## Legend for Site Plan



House and Well



Well / Spring



Perennial Streams & Surface



Wet Spot



Intermittent Stream / Drainage



Trees and Woods



Private Drive



Rock / Rocky Area



Sinkhole



Severely Eroded Spot



State Road



Field Boundary / Fence



Property Line

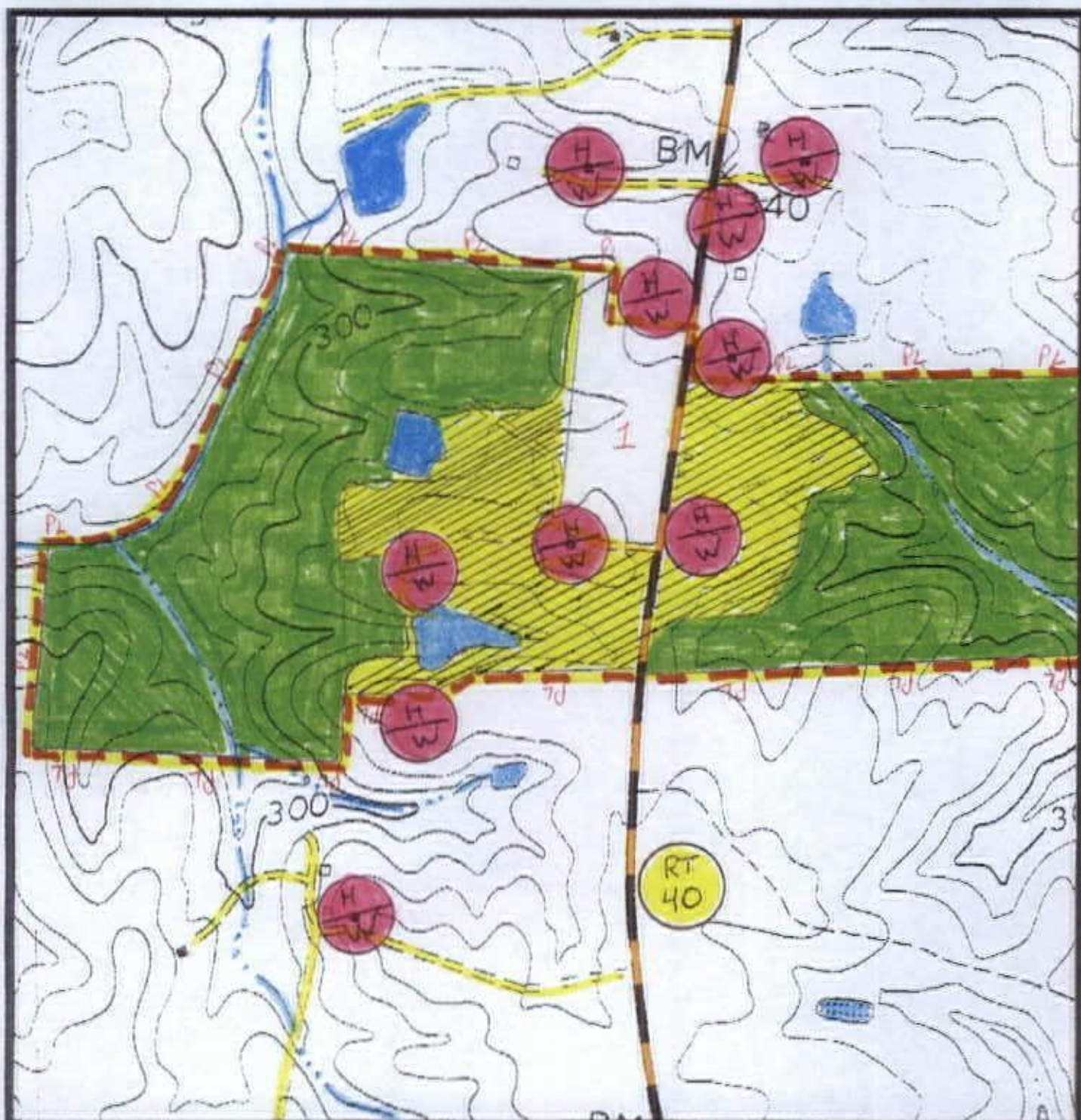


Slope



# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

DWRWB 1

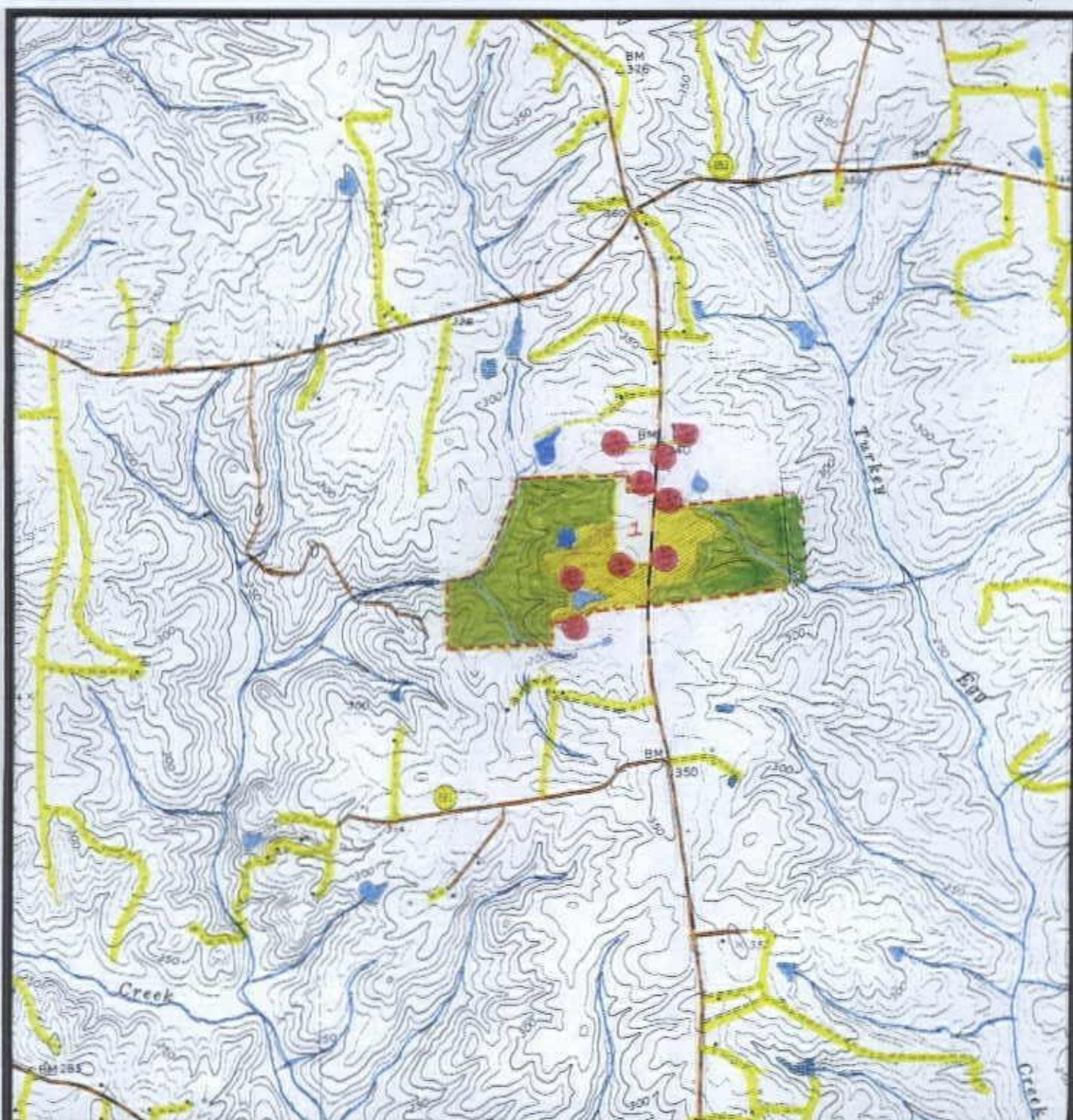
SITE PLAN





# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:**

1 inch = 2,000 feet

DWRWB 1

**TOPOGRAPHIC MAP**

